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How your viewpoint impacts your mortgage leverage choice

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Borrower's beliefs about future housing prices generally play a key role in their mortgage-leverage decisions. There are various reasons for this relationship that can be examined with models of consumer behavior. In "House price beliefs and mortgage leverage choice" (National Bureau of Economic Research, Working Paper No. 24091, November 2017), Michael Bailey, Eduardo Davila, Theresa Kuchler, and Johannes Stroebel attempt to better understand the relationship between borrowers' beliefs and mortgage decisions.

The researchers combined housing market information with data from a Facebook survey of would-be homebuyers to create a model showing the relationship between home-price fluctuations and home-buyer risk tolerance. The model showed that borrowers took on more debt (i.e., reduced their downpayment, increasing the principal owed) when they believed that real estate prices were going down. The reverse was true of borrowers who believed the real estate market was going up.

The researchers considered two types of borrowers—optimists (people who believe that housing prices will increase) and pessimists (people who believe prices will decrease)—operating under two scenarios. In scenario (1), housing as investment, expected return and downpayment protection tend to be the most important factors for the borrower. In scenario (2), housing as consumption, family size and other factors are more important than return on investment. Under both scenarios, optimistic borrowers are more willing to purchase as much housing that they can afford (taking on less debt) because they expect their returns to be higher. Pessimistic borrowers, on the other hand, tend to be most concerned with protecting themselves against losses. Under scenario (1), pessimists generally reduce exposure by purchasing smaller houses. Under scenario (2), pessimists generally make smaller downpayments (thereby taking on more debt) because they can simply walk away from the mortgage loan as a way of minimizing loss. Borrowers' social cost (what friends may think of them) was found to play a minimal role in the decision to walk away from a costly mortgage.

How did Facebook play a role? Researchers verified that distant friends can shift an individual's beliefs about housing price fluctuations. This was determined by surveying a group in Los Angeles and asking several questions about their beliefs, including about future expectations of housing prices in their zip code. The survey showed that if a respondent's friend experienced a 1-percentage-point increase in housing price over the previous 24 months, the respondent would expect a 0.33 percent increase over the coming year.

In the end, family size and neighborhood played a role. A homebuyer who believed that the market was due for a downturn would typically avoid a less-safe neighborhood or buy a smaller house. The willingness to adjust due to changing market prices was referred to as “collateral adjustment friction” by the authors. This was key to determining housing price beliefs to mortgage leverage choices.